

Remarks/Arguments:

Generally, this invention relates to transmission of SMS messages in an IP protocol directly from an SMS-SC to a GGSN (dedicated port within the GGSN) wherein the GGSN must determine a serving SGSN from an HLR (GPRS) and then send the SMS message to the serving SGSN for delivery in one of a plurality of formats. While the works of Salin appear somewhat close because they refer to data packets, the reference to Salin alone or in combination with other references simply does not suggest the present invention and does not disclose or suggest all of the claimed elements.

Claim 6 was rejected under 35 U.S.C. 102(e) as being anticipated by Salin. The Official Action stated,

“Regarding claim 6 Salin teaches transceiver circuitry for receiving communication signals over a wireless communication link (see col. 6, lines 15-25 and FIG. 1); and SMS message processing circuitry for reconstructing and processing SMS messages transmitted in a data packet format, the processing circuitry being coupled to received data packets from transceiver circuitry (see col. 6, lines 15-55).”

Salin discusses first and secondary networks. The two “networks” of Salin are the GPRS network and the voice network (see col. 2, lines 27-52). Col. 6, lines 15-25 also do not disclose what is being claimed. Figure 1 of Salin shows that an SMS-SC couples to an SGSN for delivery of SMS messages either directly (Gd interface) or by way of an MSC. The text of Salin does not modify this architecture and certainly does not disclose producing SMS messages in an IP protocol data packet form to a dedicated port in a GGSN. Figure 1 shows no coupling from SMS message center to the GGSN. Because Salin does not disclose or suggest transmitting SMS messages directly to a GGSN by way of the Internet using an IP data packet protocol, a mobile station of Salin could not possibly receive an SMS message in one of two data formats wherein one data format includes an IP data packet format. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. The identical invention must be shown in as complete detail as is contained in the claim. MPEP § 2131, p. 2100-69 (August 2001). Because Salin does not disclose all elements of the claimed invention, it is believed that the rejection under 102(e) is overcome.

Claim 7 was rejected under 35 U.S.C. 103(a) as being unpatentable over Salin in view of Lorello. The Official Action stated,

“Regarding claim 7 Salin teaches a device as recited in claim 6 except for legacy SMS message processing circuitry wherein the mobile terminal is coupled to receive SMS messages in both data packet and in legacy SMS message formats. Salin does teach an SMS message that can be transmitted over a primary or a secondary network (see col. 24, lines 1-14) and a data packet network (see abstract and col. 6, line 1-10). Lorello teaches transmitting a message in a legacy SMS network (see col. 9, lines 60-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include legacy SMS message processing circuitry wherein the mobile terminal is coupled to receive SMS messages in both data packet and in legacy SMS message formats because this would allow for a flexible routing mechanism that allows for a combination of network routing.”

Because the base claim 6 is believed to overcome the cited art for the reasons stated above, it is also believed that claim 7 overcomes the cited art and the rejection over 35 U.S.C. 103(a) for the same reasons.

Claims 8-10 were rejected under 35 U.S.C. 103(a) as being unpatentable over Salin in view of Lorello and Chern. The Official Action stated,

“Regarding claim 8 Salin and Lorello teach a device as recited in claim 7 except for audio processing circuitry coupled to receive communication signals from transceiver circuitry. Chern teaches audio processing circuitry coupled to receive communication signals from transceiver circuitry (see col. 4, lines 29-35, col. 14, lines 50-57 and FIG. 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the invention adapt to include audio processing circuitry coupled to receive communication signals from transceiver circuitry because this would allow for a wireless device capable of receiving an audio SMS alert message.”

The Applicants believe that this ground of rejection is also overcome for the reasons that are stated for the base claims.

Claims 1-5 were rejected under 35 U.S.C. 103(a) as being unpatentable over Chern in view of Henry-Labordere and Salin. The Official Action stated,

“Regarding claim 1 Chern teaches a mobile terminal comprising: a processor; a memory; transceiver circuitry; an internal bus coupled to a memory, to the transceiver circuitry and to the processor (see col. 15, lines 60-67 and FIG. 7). Chern does not teach a memory that includes computer instructions that define operational logic of the mobile terminal to enable the mobile terminal to remove IP packet header information of a plurality of data packets and to construct an SMS message. Henry-Labordere teaches computer instructions that define operational logic of a mobile terminal to enable the mobile terminal to remove header information to construct an SMS message (see abstract, col. 3, lines 38-57, and col. 12, lines 34-67). Henry-Labordere also teaches IP address information (see col. 13, lines 9-30). Salin teaches a plurality of data packets that construct an SMS message (see col. 6, lines 15-25 and 45-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the invention adapt to include a memory that includes computer instructions that define operational logic of the mobile terminal to enable the mobile terminal to remove IP packet header information of a plurality of data packets and to construct an SMS message because this would allow for a flexible mechanism that allows for a combination of network routing.”

Henry-Labordere teaches using relays to bridge from one network to another wherein the bridge may be coupled to the networks by the Internet. Accordingly, Henry-Labordere that messages may be transmitted by way of the Internet through a relay device. Henry-Labordere does not teach that which is claimed. More specifically, none of the references teach a SMS message center generating SMS messages for delivery to a mobile by way of the Internet. Accordingly, none of the references teach or suggest a mobile station that can receive (and generate) SMS messages in one of a legacy format or an IP protocol data packet format.

Claims 11 and 13-15 were rejected under 35 U.S.C. 103(a) as being unpatentable over Salin in view of Henry-Labordere. The Official Action stated,

“Regarding claim 11 Salin teaches a GPRS capable mobile terminal or receiving an SMS message, comprising: receiving a plurality of data packets; determining that the plurality of data packets from an SMS message; reforming an SMS message; and processing the SMS message by SMS processing circuitry within the mobile station (see abstract, col. 6, lines 1-12 and 29-55; and col. 11, lines 13-35). Salin does not specifically teach removing packet header information. Henry-Labordere teaches removing header information to construct

an SMS message (see abstract and col. 3, lines 38-57). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the invention adapt to include removing packet header information because this would allow for a flexible mechanism that allows for a combination of network routing”

Henry-Labordere actually teaches how addresses are used in SMS messages for routing. These addresses are part of the SMS message. Henry-Labordere does not teach, however, constructing IP data packets that collectively form an SMS message that form an SMS message and removing the IP data packet headers to create an SMS message that also contains the SMS headers with SMS routing information.

The Official Action also stated,

“Regarding claim 15 Salin teaches IP address information of a message center for transmission of data packets (see col. 6, lines 35-55 and col. 7, lines 25-31). Henry-Labordere teaches inserting header address information into an SMS message (see col. 3, lines 28-56).

As discussed previously, Salin does not teach transmitting SMS messages over the Internet to a GGSN. Accordingly, Salin cannot teach inserting IP address information into a data packet forming an SMS message. Thus, Henry-Labordere cannot teach and does not teach having SMS headers with address information as well as IP data packets that form SMS messages further having address information. Additionally, since claim 15 depends upon claim 11, it is believed that claim 15 also overcomes the grounds of rejection.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the references must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the cited references, and not based on Applicant’s disclosure. MPEP 2143, p. 2100-121 (August 2001).

Thus, the Applicants respectfully traverse these rejections under 35 U.S.C 103(a) in that a *prima facie* case of obviousness has not been established. More specifically, the teachings or suggestions of the cited references above or in combination simply do not render the claims obvious under 35 U.S.C. 103(a) because they do not address the problems addressed by the present invention, the motivations are different and not all of the claimed elements are shown. While the Applicants genuinely believe the originally filed claims were allowable under these legal standards over the cited art, the Applicants have amended the claims herein to more clearly highlight the differences, though they are believed to be present in the originally filed claims. As each of the independent claims is believed allowable, the Applicants further believe that the rejections to the dependent claims are overcome.

Please direct any questions or comments to the undersigned attorney regarding the Notice of Allowance in this case.

Respectfully submitted,

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